Effectiveness of interactive teaching intervention on medical students’ knowledge and attitudes toward stem cells, their therapeutic uses and potential research applications

Fayez Abdulrazeq¹, Khalid Kheirallah¹, Abdallah Alzoubi¹, Mohammad A. Al-Qudah¹, Jomana Alsulaiman², Mazhar Al Zoubi², and Abdulwahab Al-Maamari³

¹Jordan University of Science and Technology Faculty of Medicine
²Yarmouk University Faculty of Medicine
³Isra University Faculty of Law

November 7, 2020

Abstract

Aims: To evaluate the effectiveness of an interactive teaching intervention on medical students’ knowledge and attitudes about stem cell research and therapy. Methods: A quasi-experimental, one group pre-posttest study design was employed. A six-session interactive teaching course (intervention) was conducted for a duration of 6 weeks. Pre and post intervention surveys were used. Differences in students’ knowledge and attitude mean scores were examined using paired t-test, while gender differences were examined using independent t-test. Results: Seventy one sixth year medical students were invited to participate in this study. A pre-intervention survey was distributed to 58 students who agreed to participate (81.6%). Out of 58 students, only 48 (82.7%) completed the entire course. Total knowledge scores and attitude score significantly increased post intervention. Significant gender differences in knowledge and attitude scores were not detected post intervention. Conclusions: Integrating stem cell science into medical curricula coupled with interactive learning approach were effective in increasing students’ knowledge about recent advances in stem cell research and therapy, and in improving attitudes toward stem cells research and applications.

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Fayez Abdulrazeq (¹), Khalid Kheirallah (²), Abdallah Alzoubi (³, ⁴), Mohammad A. Al-Qudah (⁵), Jomana Alsulaiman (⁶), Mazhar Salim Al Zoubi (⁷), Abdulwahab Al-Maamari (⁸).

1- Department of Public Health and Community Medicine, Faculty of Medicine, Jordan University of Science and Technology, Irbid, Jordan, 22110.
2- Department of Public Health and Community Medicine, Faculty of Medicine, Jordan University of Science and Technology, Irbid, Jordan, 22110.
3- Department of Pharmacology, Faculty of Medicine, Jordan University of Science and Technology, Irbid, Jordan, 22110.
4- College of Medicine, Ajman University, Ajman, United Arab Emirates.
5- Department of Pathology, Faculty of Medicine, Jordan University of Science and Technology, Irbid, Jordan, 22110.

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List of Authors:

<table>
<thead>
<tr>
<th>Order</th>
<th>Position</th>
<th>First name</th>
<th>Last (family) name</th>
<th>Email</th>
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<tbody>
<tr>
<td>1st</td>
<td>Lecturer</td>
<td>Fayez</td>
<td>Abdulrazeq</td>
<td><a href="mailto:faabdulrazeq16@med.just.edu.jo">faabdulrazeq16@med.just.edu.jo</a></td>
</tr>
<tr>
<td>2nd</td>
<td>Associate Professor</td>
<td>Khalid</td>
<td>Kheirallah</td>
<td><a href="mailto:kakheirallah@just.edu.jo">kakheirallah@just.edu.jo</a></td>
</tr>
<tr>
<td>3rd</td>
<td>Associate Professor</td>
<td>Abdallah</td>
<td>Alzoubi</td>
<td><a href="mailto:aaalzoubi28@just.edu.jo">aaalzoubi28@just.edu.jo</a></td>
</tr>
<tr>
<td>4th</td>
<td>Associate Professor</td>
<td>Mohammad</td>
<td>Al-Qudah</td>
<td><a href="mailto:m.alqudah12@just.edu.jo">m.alqudah12@just.edu.jo</a></td>
</tr>
<tr>
<td>5th</td>
<td>Assistant Professor</td>
<td>Jomana</td>
<td>Alsulaiman</td>
<td><a href="mailto:jomana.a@yu.edu.jo">jomana.a@yu.edu.jo</a></td>
</tr>
<tr>
<td>6th</td>
<td>Associate Professor</td>
<td>Mazhar</td>
<td>Al Zoubi</td>
<td><a href="mailto:mszoubi@yu.edu.jo">mszoubi@yu.edu.jo</a></td>
</tr>
<tr>
<td>7th</td>
<td>Associate Professor</td>
<td>Abdulwahab</td>
<td>Al-Maamari</td>
<td><a href="mailto:almamary3@hotmail.com">almamary3@hotmail.com</a></td>
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Corresponding Author:

Fayez Abdulrazeq, M.D. MSc

Email: faabdulrazeq16@med.just.edu.jo

ORCID ID: https://orcid.org/0000-0003-3131-2042

Telephone: +962795249320

Disclosure: the authors declare no conflict of interest.

Keywords: Quasi experimental, stem cells, medical education, interactive teaching, Jordan

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